

Notice of Allowability

Application No.

10/692,496

Applicant(s)

HELMER ET AL.

Examiner

BARBARA N. BURGESS

Art Unit

2457

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Appeal Brief filed November 20, 2008.
2. ☒ The allowed claim(s) is/are 1-5, 7-12, 14-18 and 20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 2-9-09
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

/ARIO ETIENNE/
Supervisory Patent Examiner, Art Unit 2457

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this Examiner's Amendment was given in a telephone interview with Jeffrey Giunta on February 9, 2009.

IN THE CLAIMS

Please amend the following claims:

8. (Currently Amended) A computing node comprising:

a processor;

a main memory;

a fast data element transmitter adapted to:

identify a pre-defined destination node, the pre-defined destination node being

within a plurality of remote computer nodes to which data packets are able to be sent over a data communications network;

queue, in an expedited transmission queue that is separate from a normal data

packet queue, a first data packet that is addressed to the pre-defined destination node,

wherein the normal data packet queue is used to queue data packets for transmission

to other computing systems within the plurality of remote computer nodes, the other

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computing systems comprising destination nodes that are not the pre-defined destination node;

send, through a communications adapter, the first data packet to the pre-defined destination node; and

a fast descriptor interface adapted to load a packet descriptor associated with a second data packet into the communications adapter concurrently with the sending of the first data packet by the fast data element transmitter, wherein the packet descriptor identifies the pre-defined destination and is used to configure the fast data packet transmitter for transferring a second data element, and

wherein the fast data element transmitter is further adapted to transfer, in dependence upon the packet descriptor, the second data packet to the second destination node over the data communications network.

14. (Currently Amended) A non-volatile memory tangibly encoded with a program which, when executed by a processor, performs operations for transferring a data message, the operations comprising:

identifying a pre-defined destination node, the pre-defined destination node being within a plurality of remote computer nodes to which data packets are able to be sent over a data communications network;

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queuing, in an expedited transmission queue that is separate from a normal data packet queue, a first data packet that is addressed to the pre-defined destination node, wherein the normal data packet queue is used to queue data packets for transmission to other computing systems within the plurality of remote computer nodes, the other computing systems comprising destination nodes that are not the pre-defined destination node;

sending, through a communications adapter, the first data packet to the pre-defined destination node;

loading a packet descriptor associated with a second data packet into the communications adapter, wherein the loading is concurrent with the sending and the packet descriptor identifies a second destination node that is the pre-defined destination node; and

transferring, in dependence upon the packet descriptor, the second data packet to the second destination node over the data communications network.

15. (Currently Amended) The non-volatile memory of claim 14, wherein the expedited transmission queue comprises a fast data queue, and wherein the sending of the first data packet and the transferring of the second data packet comprises loading the first data packet and the second data packet into the fast data queue, wherein the fast data queue only queues data packets for transmission to the pre-defined destination node over the data communications network.

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16. (Currently Amended) The non-volatile memory of claim 14, wherein each of at least one of the first

data packet and the second data packet each comprise a user data portion that is equal to a size of a cache buffer.

17. (Currently Amended) The non-volatile memory of claim 14, wherein the loading further comprises

configuring, concurrently with the sending of the first data packet to the pre-defined destination node, the communications adapter for the transferring of the second data packet to the pre-defined destination node over the data communications network.

18. (Currently Amended) The non-volatile memory of claim 14, wherein the expedited transmission

queue comprises a fast data queue and a fast descriptor queue, and

wherein the loading operation comprises loading the packet descriptor into the

fast descriptor queue for subsequent transfer to the communications adapter, and

wherein the method further comprises loading the second data packet that is associated with the packet descriptor into the fast data queue.

20. (Currently Amended) The non-volatile memory of claim 18, wherein the operations further comprise altering the packet descriptor, after the loading the packet descriptor and while the packet descriptor is in the fast descriptor queue, so as to change the second destination

node to be a remote destination node that is different than the pre-defined destination node, and

reloading the packet descriptor into the communications adapter after the altering
and prior to transferring the second data packet.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA N. BURGESS whose telephone number is (571)272-3996. The examiner can normally be reached on M-F (8:00am-4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Barbara N Burgess/
Examiner, Art Unit 2457

February 9, 2009

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/ARIO ETIENNE/

Supervisory Patent Examiner, Art Unit 2457